

October 21, 2008

**By Electronic Filing**

Chairman Kevin J. Martin  
Commissioner Jonathan S. Adelstein  
Commissioner Michael J. Copps  
Commissioner Robert M. McDowell  
Commissioner Deborah Taylor Tate

Federal Communication Commission  
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Washington, DC 20554

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*Executive Director*

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Beth Williams  
Steve Winton  
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Re: **Ex Parte Comments of the Broadway League  
ET Docket No. 04-186  
Introduction of Unlicensed Devices in the "White Spaces"**

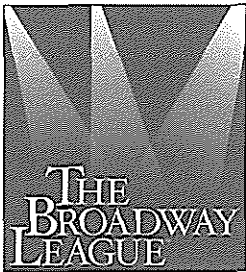
Dear Chairman Martin, Commissioners Adelstein, Copps, McDowell & Tate:

The Broadway League submits these supplemental comments<sup>1</sup> in response to the FCC Laboratory Division's evaluation of White Space devices released on October 15 and the Commission's announcement that it will vote on an order opening the TV spectrum to unlicensed devices, including devices using spectrum sensing technology, at a meeting scheduled for November 4, 2008. Based on the now well documented inability of the tested devices to reliably detect ambient white space transmissions – ranging from complete equipment failure to sporadic detection – the Broadway League is gravely concerned that the FCC appears determined to implement the White Spaces Coalition's poorly conceived plan to use the white spaces for national internet access.

As the Broadway League has noted in earlier filings, The League is the national trade association for the Broadway industry. The League's 600-plus members include theatre owners and operators, producers, presenters, and general managers in North American cities, as well as suppliers of goods and services to the commercial theatre industry. Each year, League members bring live theatre to more than 30 million people in New York and more than 240 cities across the U.S. and

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<sup>1</sup> Please see The Broadway League's filings of October 5, 2007 and June 10, 2008.



Canada. The League supports its members through an array of programs and events designed to promote live theatre as a vibrant national entertainment medium.

Current statistics on Broadway's economic significance demonstrate that this industry annually contributes more than \$5 billion to the City of New York and generates the equivalent of 44,000 full time jobs. Outside of New York, touring Broadway productions help infuse the nation's economy with over \$3 billion annually. Wireless microphones are an essential tool of the live performance industry, used in the daily operations of countless theatres and non-profit performance venues, as well as by museums, churches, schools, musicians, newscasters and sportscasters.

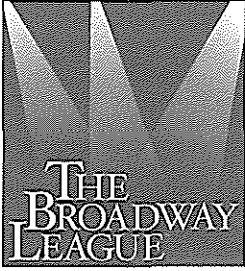
The Commission has declined to allow interested parties to review the specific tenets of its decision on the instant Docket until its vote on November 4, 2008, possibly indicating the Commission's intent to immediately implement measures provided in the White Spaces Coalition's request. We support the National Association of Broadcasters' recently filed Emergency Request asking the Commission to seek comment on the October 15, 2008 report.<sup>2</sup> We urge the Commission to consider public input on the data, analysis and conclusions contained in the recently released Test Report before issuing a final rule in this proceeding.

The Broadway League certainly understands the enormous economic clout and world-wide brand recognition enjoyed by the members of the White Spaces Coalition. We also acknowledge that, when offered by well respected technological firms, even wholly unsubstantiated guarantees may bear considerable significance. However, as the Federal body charged with overseeing national broadcast guidelines, we advocate that the FCC discard all self-serving and unproven assertions, take into account the true needs of all incumbent wireless microphone users and carefully contemplate its office's own findings.

As demonstrated by a preliminary review of the October 15 report, spectrum sensing technology is patently useless. Accordingly, regulations that include

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<sup>2</sup> Emergency Request, filed by The Association for Maximum Service Television, Inc. ("MSTV"), the National Association of Broadcasters ("NAB"), the ABC, CBS, and FOX Television Networks and the Open Mobile Video Coalition ("OMVC"), ET Docket Nos. 04-186 and 02-380, October 17, 2008.

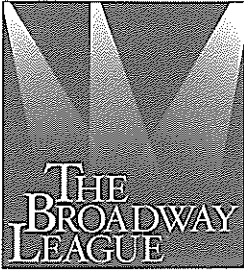


reference to this technology would simply ignore the actual functioning of the technology and rely on pure speculation. Unfortunately, the countless industries utilizing wireless technology do not have the luxury of adopting this “wait and see” approach. Theatres in heavily congested urban areas are at particular risk because, should interference from a hand-held white space device disrupt a performance, house engineers will have no way to determine, and subsequently report, the source of the interference. Further, assuming *arguendo* that spectrum sensing was a viable technology, users of malfunctioning devices would have no way to determine their piece of equipment is causing interference with nearby broadcasts.

The Broadway League believes any action on the White Space Coalition’s petition is premature. However, should the FCC go forward and implement new regulations at this time, we beg the Commission to recognize incumbent white space users and, at the very minimum, employ the following basic protections:

1. All reference to the use of spectrum sensing technology, particularly in America’s cities, must be abandoned. As demonstrated by the October 15 report, this technology is wholly unreliable as the devices are, at best, easily confused and, at worst, simply nonfunctional. Further, ambient signal activity in urban environments is subject to an unlimited number of variables that cannot be controlled or monitored. Accordingly, all signal traffic in these regions should be coordinated by a form of geolocation, incorporating a database of occupied channels.
2. The above mentioned geolocation database must be accessible so additional frequencies may be added to further restrict hand held devices’ access to the white spaces for certain, limited purposes (such as large concerts).
3. The FCC’s Rules for Part 74 wireless microphone users must be revised to acknowledge all current applications. A mechanism must be implemented to allow all incumbent users, including unlicensed broadcasters, to access and utilize the aforementioned geolocation database.
4. Channels must be permanently allocated for theatrical and entertainment uses. Due to the massive number of entertainment industries utilizing the white spaces and the amount of spectrum required for each use, the FCC must allocate at least 7 channels in the UHF band and 3 channels in the VHF band for these applications.
5. Any costs associated with the purchase of new equipment, or for updating existing wireless systems, must be shouldered by the manufacturers of the new devices. Such devices would be entering a heavily occupied spectrum and may place a significant financial and technological burden on incumbent users.

The foregoing notwithstanding, The Broadway League reiterates its initial request that the FCC refrain from approving portable white space devices at this



time. Giving the legitimate needs of incumbent wireless users and the repeated failure of spectrum sensing equipment their due consideration, we again ask that the FCC deny any application for national access to the white spaces with portable equipment until a technology or proposal is successfully tested and demonstrated to be reliable under real world conditions.

Sincerely,

Charlotte St. Martin, Executive Director  
The Broadway League

Nina Lannan, Chair  
The Broadway League